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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,630	10/23/2003	Sriram Subramanian	4120	1530

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EXAMINER	
CHUNG, DANIEL J	

ART UNIT	PAPER NUMBER
2677	

DATE MAILED: 07/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/693,630	SUBRAMANIAN ET AL.	
	Examiner	Art Unit	
	Daniel J. Chung	2672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 May 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-67* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-67* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claims 1-67 are presented for examination. This office action is in response to the amendment filed on 5-13-2005.

Claim Objections

Claim 56 is objected to because of the following informalities: In claim 56, "...video media d with..." should apparently read "...video media data with...". Appropriate correction is required. Applicant is respectfully requested to carefully review all claims for any other informalities that require correction.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-64 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-64 of copending Application No.10/693,673. Although the conflicting claims are not identical,

they are not patentably distinct from each other because both sets of claims recited similar inventive concept of a computer implemented method and system for manipulating computer graphics data to output graphics.

Regarding claim 1, presented application does not have a limitation of "the object part of an object model associated with a scene graph" of the limitations in claim 1 of U.S No. 10/693,673, however, It would have been obvious to one of ordinary skill in the art at the time the invention was made to delete "the object part of an object model associate with a scene graph" of U.S No.10/693,673 to arrive invention of the present application, as utilizing the part of object model is known for accomplishing complicated image process, so such functions/steps or the elements are not desired for preventing complicated image system.

Regarding claim 2-64, limitations of presented application are same scope of claims 2-64 of U.S No.10/693,673.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent

granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-67 are rejected under 35 U.S.C. 102(e) as being anticipated by David et al. (US 2004/0189669)

Regarding claim 1, David et al discloses that the claimed feature of a computer implemented method for arranging computer graphics data for processing into an output, comprising; receiving a function call [i.e. "function/method calls"] via an application program interface ["API"; 212] of a media integration layer ["MIL"], the function call corresponding to graphics-related data (See Fig 2, Fig 3, [47],[49-51]); and causing data [i.e. "scene change data"] in a scene graph data structure to be modified based on the function call ["calls"]. (See [13],[47-51],[53],[61])

Regarding claim 2, David et al discloses that causing data in a scene graph data structure to be modified comprises invoking a function to initialize a new instance of a visual class. (See [47-51],[53],[63])

Regarding claim 3, David et al discloses that receiving a function call via an interface corresponding to a transform ["transform"] associated with the visual. (See Abstract line 9, [14],[66],[75],[120-122])

Regarding claim 4, David et al discloses that causing data in a scene graph data structure to be modified comprises invoking a function to initialize a new instance of a drawing visual class. (See [47-51],[53],[63])

Regarding claim 5, David et al discloses that receiving a function call via an interface to open the drawing visual instance for rendering, and in response, causing a drawing content to be returned, the drawing context providing a mechanism for rendering into the drawing visual. (See Fig 2, Fig 3, [47],[49-51],[65])

Regarding claim 6, David et al discloses that receiving brush data in association with the function call, and wherein causing data in a scene graph data structure to be modified comprises invoking a brush [i.e. "brush"] function to modify a data structure in the scene graph data structure such that when a frame is rendered from the scene graph, an area will be filled with visible data corresponding to the brush data. (See [61],[102])

Regarding claims 7-11, David et al discloses that receiving brush data comprises receiving data corresponding to a solid color [i.e. "color"], a linear/radial gradient brush ["brush size"], an image effect to apply to the image ["image effect"], and a stop collection comprising at least one stop. (See [61],[102])

Regarding claim 12, David et al discloses that receiving pen data in association with the function call, and wherein causing data in a scene graph data structure to be modified comprises invoking a pen ["pen"] function that defines an outline of a shape. (See [61],[102],[149])

Regarding claims 13-16, David et al discloses that causing data in a scene graph data structure to be modified comprises invoking a geometry related function to represent an ellipse/rectangle/path/line in the scene graph data structure. (See [61],[72],[82],[120])

Regarding claims 17-19, David et al discloses that causing data in a scene graph data structure to be modified comprises invoking a function related to hit-testing/transforming coordinates/calculating a bounding box of a visual in the scene graph data structure. (See [66],[72-75],[99],[120],[122])

Regarding claim 20, David et al discloses that causing data in a scene graph data structure to be modified comprises invoking function via a common interface to a visual object in the scene graph data structure. (See [163])

Regarding claim 21, David et al discloses that invoking a visual manager to render a tree of at least one visual object to a rendering target. (See Fig 2, Abstract, [79],[103])

Regarding claim 22, David et al discloses that causing data in a scene graph data structure to be modified comprises invoking function to place a container [i.e. "container"] object in the scene graph data structure, the container object configured to contain at least one visual object. (See [10],[59])

Regarding claim 23, David et al discloses that causing data in a scene graph data structure to be modified comprises invoking function to place image data into the scene graph data structure. (See [61])

Regarding claim 24, David et al discloses that causing data in a scene graph data structure to be modified comprises invoking function to place an image effect object into the scene graph data structure that is associated with the image data. (See [69],[80])

Regarding claim 25, David et al discloses that causing data in a scene graph data structure to be modified comprises invoking function to place data corresponding to text ["text"] into the scene graph data structure. (See [76])

Regarding claim 26, David et al discloses that causing data in a scene graph data structure to be modified comprises invoking function to provide a drawing context in response to the function call. (See [47-51],[53],[63])

Regarding claim 27, David et al discloses that the function call corresponds to a retained visual, and further comprising, calling back to have the drawing context of the retained visual returned to the scene graph data structure. (See Fig 2, Fig 3, [47],[49-51],[65])

Regarding claim 28, David et al discloses that causing data in a scene graph data structure to be modified comprises invoking function to place a three-dimensional visual into the scene graph data structure. (See [11],[13])

Regarding claim 29, David et al discloses that causing data in a scene graph data structure to be modified comprises invoking function to map a two-dimensional surface onto the three dimensional visual. (See [70])

Regarding claim 30, David et al discloses that causing data in a scene graph data structure to be modified comprises invoking function to place animation data [i.e. "animation"] into the scene graph data structure. (See [54],[58])

Regarding claim 31, David et al discloses that communicating timeline [i.e. "timeline"] information corresponding to the animation data to a composition engine at another layer of the media integration layer. (See [54],[58],[126-127],[149-166])

Regarding claim 32, David et al discloses that the composition engine interpolates graphics data based on the timeline [i.e. "timeline"] to animate an output corresponding to an object in the scene graph data structure. (See [126-127],[149-166])

Regarding claim 33, David et al discloses that receiving a function call via an interface comprises receiving markup [i.e. "markup"], and wherein causing data in a scene graph data structure to be modified comprises parsing the markup into a call to an interface of an object. (See [47],[50])

Regarding claim 34, David et al discloses that causing data in a scene graph data structure to be modified comprises invoking function to place an object corresponding to audio ["audio"] and/or video ["video"] data into the scene graph data structure. (See [148])

Regarding claim 35, David et al discloses that causing data in a scene graph data structure to be modified comprises invoking function to change a mutable ["mutable"] value of an object in the scene graph data structure. (See [10],[119])

Regarding claim 36, refer to the discussion for the claim 1 hereinabove, David et al discloses that the claimed feature of in a computing environment, a computer system comprising: a scene graph data structure ["scene graph structure"] of a layered system for containing data that can be rendered into output that for subsequent integrated

output that can be viewed ["media integration layer"]; and an object model including visual objects and other data that can be contained in the scene graph data structure, at least some of the objects of the object model having application program interfaces ["API"] for invoking functions ["functions"] to modify contents of the scene graph data structure. (See Fig 2, Fig 3, [13],[47-51],[53],[61])

Regarding claim 37, David et al discloses that at least one function is invoked to place a tree of visual objects into the scene graph data structure. (See Fig 2, Abstract, [79],[103])

Regarding claim 38, David et al discloses that a visual manager that when invoked renders the tree of visual objects to a rendering target. (See Fig 2, Abstract, [79],[103])

Regarding claim 39, David et al discloses that the tree of visual objects is contained in a visual collection object. (See Fig 2, Abstract, [79],[103])

Regarding claim 40, David et al discloses that at least one function of an object of the object model is invoked to place the visual object into the scene graph data structure. (See [61])

Regarding claim 41, David et al discloses that at least one function of an object of the object model is invoked to associate a brush ["brush"] with the visual object. (See Fig 2, Fig 4, [18],[56],[60])

Regarding claim 42, David et al discloses that at least one function of an object of the object model is invoked to associate a geometry with the visual object. (See [61],[72],[82],[120])

Regarding claim 43, David et al discloses that the geometry comprises at least one of a set containing an ellipse geometry, a rectangle geometry [i.e. "rectangle"], a line geometry [i.e. "line"] and a path [i.e. "path"] geometry. (See [61],[72],[82],[120])

Regarding claim 44, David et al discloses that at least one function of an object of the object model is invoked to associate a transform ["transform"] with the visual object. (See Abstract line 9, [14],[66],[75],[120-122])

Regarding claims 45-48, David et al discloses that the transform comprises a rotate/scale/translate/skew transform [i.e. "transform", where 'rotation', 'translation', 'skewing' is well known object manipulation of transform process in an analogous art] for changing a perceived angle of the visual object. (See Abstract line 9, [14],[66],[75],[120-122])

Regarding claim 49, David et al discloses that comprising animation information associated with the transform, and wherein the animation information causes transformation data associated with the transform to change over time thereby animating the transformation of the visual object over time. (See Abstract line 9, [14],[66],[75],[120-122])

Regarding claims 50-57, David et al discloses that at least one function of an object of the object model is invoked to associate a color/ gradient data/ brush/ image/ three dimensional data/ drawing primitives/ audio and/or video data/ image effect with the visual object. (See [61],[72],[82],[102],[120],[148-149])

Regarding claim 58, David et al discloses that at least one function of an object of the object model is invoked to associate a pen ["pen"] with the visual object, to describe how a shape is outlined. (See [61],[102],[149])

Regarding claim 59, David et al discloses that at least one function of an object of the object model is invoked to obtain a drawing context associated with the visual object. (See Fig 2, Fig 3, [47],[49-51],[65])

Regarding claim 60, David et al discloses that one function is invoked to associate hit testing data with the visual object. (See [66],[72-75],[99],[120],[122])

Regarding claim 61, David et al discloses that at least one function of an object of the object model is invoked to associate a rectangle ["rectangle"] with the visual object. (See [61],[72],[82],[120])

Regarding claim 62, David et al discloses that at least one function of an object of the object model is invoked to describe how a source rectangle should be stretched to fit a destination rectangle corresponding to the visual object. (See [61],[72],[82],[120])

Regarding claims 63-64, David et al discloses that at least one function of an object of the object model is invoked to describe how content is positioned vertically/horizontally within a container corresponding to the visual object. (See [10],[59])

Regarding claim 65, refer to the discussion for the claim 1 hereinabove, David et al discloses that the claimed feature of in a computing environment, a computer system comprising: application program interface ["API"] means for receiving function calls ["function calls"]; high-level composition means for integrating graphics related data and/or media related data received via the interface means into a scene graph [i.e. "MIL"]; and rendering means for converting the scene graph into output that may be transmitted or displayed. (See Fig 2, Fig 3, [13],[47-51],[53],[61])

Regarding claim 66, David et al discloses the rendering means includes low-level composition means for constructing a frame for viewing based on data received from the high-level composition engine. (See [9])

Regarding claim 67, David et al discloses that the high-level composition engine providing timeline data to the low level composition means for interpolating the appearance of visible data across at least two frames to animate the visible data overtime. (See [9])

Response to Arguments/Amendments

Applicant's arguments with respect to claims 1-67 have been considered but are moot in view of the new ground(s) of rejection. Specifically, in response to the applicant's argument that the cited reference does not discloses receiving a function call via an application program interface, which is part of a media integration layer, the newly submitted reference (David et al) clearly teaches such features. [i.e. "API", "MIL", "function calls"] See the rejection hereinabove.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Chung whose telephone number is (703) 306-3419. He can normally be reached Monday-Thursday and alternate Fridays from 7:30am- 5:00pm. If attempts to reach the examiner by

telephone are unsuccessful, the examiner's supervisor, Michael, Razavi, can be reached at (703) 305-4713.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9306 (Central fax)

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

djc
July 20, 2005

MICHAEL RAZAVI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600